



# Senate

General Assembly

**File No. 241**

February Session, 2022

Substitute Senate Bill No. 236

*Senate, March 31, 2022*

The Committee on Environment reported through SEN. COHEN of the 12th Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

## **AN ACT CONCERNING THE USE OF BACK-UP DIESEL GENERATORS FOR PURPOSES OF PEAK SHAVING.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective July 1, 2022*) (a) For purposes of this  
2 section, "peak shaving" means the use of on-site power generation to  
3 reduce power consumption from the electric grid.

4 (b) (1) On or after July 1, 2022, any diesel reciprocating engines  
5 contemporaneously installed for emergencies and peak shaving  
6 purposes at a single facility and totaling more than five megawatts of  
7 generating capacity shall be designed and operated such that emissions  
8 of air pollutants while operating at steady-state shall not exceed:

T1	Pollutant	Emission limit (pounds per megawatt hour)
T2	Nitrogen oxide	0.6
T3	Particulate matter	0.07
T4	Carbon monoxide	2.0

T5	Non-methane	0.3
T6	hydrocarbons	

9 (2) Notwithstanding the provisions of subdivision (1) of this  
10 subsection, any such diesel reciprocating engine shall not be used for  
11 peak shaving, testing or maintenance purposes on any day for which  
12 the Commissioner of Energy and Environmental Protection forecasts  
13 that ozone levels will be "moderate to unhealthy for sensitive groups",  
14 "unhealthy for sensitive groups", "unhealthy" or "very unhealthy".

15 (3) The use of any such diesel reciprocating engine at such a facility  
16 shall be limited to not more than three hundred hours of operation per  
17 year of peak shaving and not more than five hundred cumulative hours  
18 per year of operation for peak shaving, maintenance and testing.

19 (4) The exhaust from any such diesel reciprocating engine shall exit  
20 from a stack discharge height of not less than thirty-four feet from  
21 ground elevation to meet air modeling guidelines.

22 (5) Nothing in this section shall prohibit the Commissioner of Energy  
23 and Environmental Protection from prescribing or adopting more  
24 stringent requirements for such diesel reciprocating engines, as  
25 authorized under applicable federal air permitting regulations.

This act shall take effect as follows and shall amend the following sections:		
Section 1	July 1, 2022	New section

**ENV** Joint Favorable Subst.

*The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.*

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## **OFA Fiscal Note**

**State Impact:** See Below

**Municipal Impact:** See Below

### **Explanation**

The bill limits the use of certain diesel engines to reduce power consumption from the electric grid during: (1) peak demand (a.k.a., “peak shaving”); or (2) emergencies. Peak shaving refers to leveling out peaks in electricity use by industrial and commercial power consumers. Power consumption peaks affect procurement costs. As such, restricting the practice or potential for “peak shaving” would lead to higher electricity rates for certain consumers, which may include the state and municipalities.

Also, the bill allows the Department of Energy and Environmental Protection (DEEP) adopt more stringent requirements for these engines if applicable federal air permitting regulations allow. This has no fiscal impact as the agency currently has expertise for this purpose.

### **Ratepayer Impact Statement**

Since restricting the practice or potential for “peak shaving” would lead to higher electricity rates for certain consumers, the bill may result in increased electric costs for ratepayers.

### **The Out Years**

Any increased costs to the state and municipalities in the outyears would continue into the future subject to the amount of electricity consumed and the cost of electricity.

**OLR Bill Analysis****sSB 236*****AN ACT CONCERNING THE USE OF BACK-UP DIESEL GENERATORS FOR PURPOSES OF PEAK SHAVING.*****SUMMARY**

This bill establishes emissions and hour limits for certain diesel reciprocating engines used for (1) on-site power generation to reduce power consumption from the electric grid ("peak shaving") and (2) emergencies. The limits apply to engines contemporaneously installed at a single facility and totaling more than five megawatts (MW) of generating capacity.

Under the bill, these engines must be designed and operated so that, when operating at steady-state, they do not exceed the pollutant emissions limits in Table 1 below.

**Table 1: Pollutant and Emissions Limits**

<b><i>Pollutant</i></b>	<b><i>Emissions Limits (Pounds per MW Hour)</i></b>
Nitrogen oxide	0.6
Particulate Matter	0.07
Carbon monoxide	2.0
Non-methane hydrocarbons	0.3

The bill caps the annual use of these diesel engines at (1) 300 hours of operation for peak shaving and (2) 500 cumulative hours of operation for peak shaving, maintenance, and testing.

It also:

1. prohibits these engines from being used for peak shaving, testing, or maintenance, on days for which the Department of Energy and Environmental Protection (DEEP) commissioner

forecasts that ozone levels will be “moderate to unhealthy for sensitive groups,” “unhealthy for sensitive groups,” “unhealthy,” or “very unhealthy” and

2. requires the exhaust from these engines to exit from a stack discharge height of at least 34 feet from ground elevation to meet air modeling guidelines (see BACKGROUND).

Lastly, the bill allows the DEEP commissioner to prescribe or adopt more stringent requirements for these engines if applicable federal air permitting regulations allow for her to do so.

EFFECTIVE DATE: July 1, 2022

## **BACKGROUND**

### ***Air Modeling Guidelines***

The federal Clean Air Act requires air quality modeling to be used as a tool to show compliance with air quality standards. Connecticut regulations require owners and operators of certain stationary air pollution sources to obtain permits and the DEEP commissioner may require an ambient air quality impact analysis as part of that process (Conn. Agencies Regs. § 22a-174-3a).

## **COMMITTEE ACTION**

Environment Committee

Joint Favorable Substitute

Yea 21    Nay 10    (03/21/2022)